

WHAT IS CLAIMED IS

1. A system for processing wireless data comprising:
a gateway radio packet interface receiving radio packet
data from a gateway radio packet node;

5 a content switch system coupled to the gateway radio
packet interface, the content switch system receiving the
radio packet data, extracting one or more predetermined data
fields from the radio packet data, and performing one or
more predetermined actions based on the extracted data
10 fields; and

a serving radio packet interface coupled to the content
switch system, the serving radio packet interface
transmitting the radio packet data to a serving radio packet
node.

15 2. The system of claim 1 wherein the content switch
system further comprises a quality of service system and
extracts user priority data from the radio packet data,
wherein the quality of service system allocates bandwidth
20 based upon the user priority data and stores bandwidth
allocation data in the radio packet data.

25 3. The system of claim 1 wherein the content switch
system further comprises a multicast system and extracts
multicast setup data and user identification data from the
radio packet data, wherein the multicast system addresses the
radio packet data based upon the user identification data and
the multicast setup data.

4. The system of claim 1 wherein the gateway radio packet interface comprises a gateway tunneling protocol system extracting gateway tunneling protocol data from the radio packet data and providing the gateway tunneling
5 protocol data to the content switch system.

5. The system of claim 1 wherein the content switch system further comprises a serving handoff system and the serving radio packet interface transmits the radio packet
10 data to at least two serving radio packet nodes, wherein the serving handoff system extracts the data fields from the radio packet data when the radio packet data is transferred from a first serving radio packet node to a second serving radio packet node.

15

6. The system of claim 1 wherein the content switch system further comprises a network handoff system and the serving radio packet interface transmits the radio packet data to at least two serving radio packet nodes, wherein the network handoff system extracts the data fields from the radio packet data when the radio packet data is transferred from a first serving radio packet node to a second serving radio packet node.

7. A system for processing wireless data comprising:
a content switch system coupled to a packet network,
the content switch system receiving radio packet data from
the packet network, extracting one or more predetermined
5 data fields from the radio packet data, and performing one
or more predetermined actions based on the extracted data
fields; and

10 a gateway radio packet interface receiving the radio
packet data from the content switch system and transmitting
the radio packet data to a gateway radio packet node.

8. The system of claim 7 wherein the gateway radio
packet interface comprises an Internet protocol system,
wherein the radio packet data is received from the packet
15 network contained within an Internet protocol packet, and the
Internet protocol system extracts the radio packet data from
the internet protocol packet.

9. The system of claim 7 wherein the content switch
20 system further comprises a serving handoff system
transmitting the radio packet data to at least two serving
radio packet nodes, wherein the serving handoff system
extracts the data fields from the radio packet data when the
radio packet data is transferred from a first serving radio
25 packet node to a second serving radio packet node.

10. The system of claim 7 wherein the content switch system further comprises a network handoff system transmitting the radio packet data to at least two serving radio packet nodes, wherein the network handoff system
5 extracts the data fields from the radio packet data when the radio packet data is transferred from a first serving radio packet node to a second serving radio packet node.

11. The system of claim 7 wherein the content switch system further comprises a quality of service system and extracts user priority data from the radio packet data, wherein the quality of service system allocates bandwidth based upon the user priority data and stores bandwidth allocation data in the radio packet data.

15

12. The system of claim 7 wherein the content switch system further comprises a multicast system and extracts multicast setup data and user identification data from the radio packet data, wherein the multicast system addresses the
20 radio packet data based upon the user identification data and the multicast setup data.

13. A method for processing wireless data comprising:
receiving radio packet data;
determining whether a trigger event has occurred;
extracting one or more first data fields from the radio
5 packet data if the trigger event has occurred;
performing a predetermined function using the one or
more data fields to generate one or more second data fields;
storing the second data fields in the radio packet data
to create modified radio packet data; and
10 transmitting the modified radio packet data to a
serving radio packet node.

14. The method of claim 13 wherein receiving the radio
packet data comprises receiving the radio packet data from a
15 gateway radio packet node.

15. The method of claim 13 wherein receiving the radio
packet data comprises receiving the radio packet data from a
packet network, wherein the radio packet data is contained
20 within an Internet protocol packet.

16. The method of claim 13 wherein determining whether
a trigger event has occurred comprises determining whether
one of the group of events comprising activation of a packet
25 data protocol channel, serving radio packet node handoff,
mobile network handoff, or receipt of a request for radio
packet data modification has occurred.

17. The method of claim 13 wherein extracting one or more first data fields from the radio packet data if the trigger event has occurred comprises extracting one or more of the group of data fields comprising an International
5 Mobile Subscriber Identity, a Network Layer Service Access Point Identifier, a Mobile Station ISDN number, a packet data protocol type, a packet data protocol address, a dynamic address identifier, an APN network identifier, a quality of service profile, a serving GPRS support node
10 address, a mobile station not reachable indicator, a serving GPRS support node recovery identifier, a Sequence Number Downlink, a Sequence Number Uplink, a charging identifier, and a network protocol data unit reordering identifier.

15 18. The method of claim 13 wherein performing the predetermined function using the one or more data fields to generate one or more second data fields comprises one or more of the functions comprising determining transmission priority using a quality of service profile, determining whether to transmit multicast data using an International
20 Mobile Subscriber Identity, determining whether a next radio packet data packet has been received using a Sequence Number Downlink or a Sequence Number Uplink, and determining network resource allocation using a mobile station not
25 reachable indicator.

19. The method of claim 13 wherein storing the second data fields in the radio packet data to create the modified radio packet data comprises storing one or more of the group of data fields comprising a International Mobile Subscriber Identity, a Network Layer Service Access Point Identifier, a Mobile Station ISDN number, a packet data protocol type, a packet data protocol address, a dynamic address identifier, an APN network identifier, a quality of service profile, a serving GPRS support node address, a mobile station not reachable indicator, a serving GPRS support node recovery identifier, a Sequence Number Downlink, a Sequence Number Uplink, a charging identifier, and a network protocol data unit reordering identifier.

15 20. The method of claim 13 wherein transmitting the modified radio packet data to the serving radio packet node comprises transmitting the modified radio packet data inside of an Internet protocol packet to a gateway radio packet node.

20